

Serial No. 09/223,229

In the Claims:

Claims 1-49 canceled.

50. (New) A balloon catheter, comprising:

a shaft;

a balloon mounted to the shaft, the balloon having an expanded condition and a collapsed condition, the balloon comprising:

an outer surface having at least a first portion and at least a second portion, the at least second portion comprising at least a higher-friction section having a coefficient of friction higher than the coefficient of friction of the first portion,

the higher-friction section being radially displaced from a first position, radially within the outer radial extreme of the balloon when the balloon is in the collapsed condition, to a second position, at the radial extreme of the balloon when the balloon is in the expanded condition,

the first portion being positioned at least partially at the radial extreme of the balloon when the balloon is in the collapsed position and at a position radially within the high-friction section when the balloon is in the expanded condition,

51. (New) The balloon catheter of claim 50, wherein the second portion comprises at least one rib.

52. (New) The balloon catheter of claim 50, wherein the second portion is at least partially coated with a friction-enhancing coating.

53. (New) The balloon catheter of claim 50, wherein the second portion includes spiral ribs.

54. (New) The balloon catheter of claim 50, wherein the second portion includes knobs.

55. (New) The balloon catheter of claim 50, wherein the second portion comprises cross-hatching.

Serial No. 09/223,229

56. (New) The balloon catheter of claim 50, wherein the second portion comprises a mesh.

57. (New) The balloon catheter of claim 50, wherein the balloon is substantially oval when in the expanded condition.

58. (New) The balloon catheter of claim 50, wherein the outer surface comprises at least three first portions.

59. (New) A balloon catheter, comprising:

- a shaft;

- a balloon mounted to the shaft, the balloon having an expanded condition and a collapsed condition, the balloon comprising:

- at least three outer arms and at least three connecting surfaces spaced between adjacent outer arms, the at least three outer arms having a first coefficient of friction and the at least three connecting surfaces having a portion having a second coefficient of friction higher than the first coefficient of friction

- the at least three connecting surfaces being radially displaced from a first position, radially within the at least three outer arms when the balloon is in the collapsed condition, to a second position, at the radial extreme of the balloon when the balloon is in the expanded condition,

- the at least three outer arms being positioned at the radial extreme of the balloon when the balloon is in the collapsed position and at a position radially within the at least three connecting surfaces when the balloon is in the expanded condition.

60. (New) The balloon catheter of claim 59, wherein each of the at least three connecting surfaces comprises at least one rib.

61. (New) The balloon catheter of claim 59, wherein each of the at least three connecting surfaces is at least partially coated with a friction-enhancing coating.

~~62.~~ (New) The balloon catheter of claim 59, wherein each of the at least three connecting surfaces includes spiral ribs.

Serial No. 09/223,229

63. (New) The balloon catheter of claim 59, wherein each of the at least three connecting surfaces includes knobs,

64. (New) The balloon catheter of claim 59, wherein each of the at least three connecting surfaces comprises cross-hatching.

65. (New) The balloon catheter of claim 59, wherein each of the at least three connecting surfaces comprises a mesh.

66. (New) The balloon catheter of claim 59, wherein the balloon is substantially oval when in the expanded condition.